



Pearls:

- Peripheral (up to 3 attempts).
- Intraosseous manual device (\leq 8 years of age, up to 2 attempts).
- EZ-IO device for patients >3 kg.
- External Jugular (\geq 12 years of age, up to 2 attempts).
- Any prehospital fluids or medications approved for IV use may be given through an intraosseous IV.
- All IV rates should be at KVO (minimal rate to keep vein open) unless administering fluid bolus.
- Fluid bolus amounts are 500 cc for adult and 20 cc/kg for peds and may be repeated as the situation indicates.
- External Jugular and Intraosseous lines can be attempted initially in life-threatening events where no obvious peripheral site is noted.
- Any central venous catheter may be accessed for emergency situations by Paramedic personnel. See Venous Access existing catheter protocol.